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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,415	10/22/2003	Richard D. Dettinger	ROC920030261US1	6177
46797 7590 02/21/2008 IBM CORPORATION, INTELLECTUAL PROPERTY LAW DEPT 917, BLDG. 006-1 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER PHAM, KHANH B	
			ART UNIT 2166	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/691,415

Applicant(s)

DETTINGER ET AL.

Examiner

Khanh B. Pham

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9-14 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9-14 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 11/27/2007 has been entered. Claims 1, 5, 10, have been amended. Claims 4, 8 have been canceled. Claims 1-3, 5-7, 9-14, 18-22 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 10, 18-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Goiffon et al. (US 6,453,312 B1), hereinafter "Goiffon '312".
 - "receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term" at Col. 14 lines 44-65 and Figs. 4-8;
 - "obtaining one or more parameters indicative of a state of an environment in which the query is to be executed" at Col. 14 lines 44-65, Col. 23 lines 30-40;
 - "wherein the one or more parameters comprise one or more parameters indicative of how heavily one or more system resources are loaded" at Col. 23 lines 30-40;
 - "obtaining, based on the one or more parameters and the base search term, one or more expanded search terms at Col. 15 lines 3-22;

- “modifying the query to contain one or more conditions based on the one or more expanded search terms” at Col. 17 lines 5-30.

As per claim 18, Goiffon '312 teaches a computer-readable storage medium containing a program for searching fields of a data repository using dynamic term expansion which, when executed, performs operations comprising:

- “providing a first interface allowing a user to build and save a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term” at Col. 14 lines 44-65 and Fig. 4;
- “providing a second interface allowing the user to specify a set of expanded search terms to be associated with the at least one base search term” at Fig. 5-8;
- “and further allowing the user to specify whether the set of expanded search terms should be dynamically linked with the query via a pointer used to identify a source of the set of expanded search terms” at Col. 7 lines 39-55, Col. 8 lines 35-45, Col. 10 lines 23-33 and Figs. 4-8;
- “and providing a runtime component configured to retrieve a saved query and modify the saved query to contain one or more conditions including a specified set of expanded search terms retrieved using the pointer” at Col. 9 lines 25-45, Col. 10 lines 23-35, and Col. 18 lines 15-25.

As per claim 19, Goiffon teaches the computer-readable storage medium of claim 18, wherein, "if the user has specified the set of expanded search terms should be dynamically linked with the query, saving the query comprises saving the query with information associated with the pointer" at Col. 17 lines 5-30 and Col. 18 lines 15-25.

As per claim 20, Goiffon teaches the computer-readable medium of claim 19, wherein "the runtime component is further configured to recreate the pointer based on the information associated with the pointer" at Col. 15 lines 3-60.

As per claim 21, Goiffon teaches the computer-readable medium of claim 18, wherein "the operations further comprise modifying the set of expanded search terms subsequent to saving the query and prior to obtaining the set of expanded terms using the pointer" at Col. 14 lines 13-20.

As per claim 22, Goiffon teaches the computer-readable medium of claim 21, "wherein the information associated with the pointer comprises a uniform resource locator (URL)" at Col. 8 lines 35-42.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-7, 9, 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goiffon as applied to claims 10, 18-22 above and in view of Singh (US 2003/0204759 A1), hereinafter "Singh".

As per claim 5, Goiffon '312 teaches a method of searching fields of a data repository using state-sensitive term expansion, comprising:

- "receiving, from a user, a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term" at Col. 14 lines 44-65 and Figs. 4-8;
- "obtaining one or more parameters indicative of a state of an environment in which the query is to be executed" at Col. 14 lines 44-65, Col. 23 lines 30-40;
- "obtaining, based on the one or more parameters and the base search term, one or more expanded search terms at Col. 15 lines 3-22;
- "modifying the query to contain one or more conditions based on the one or more expanded search terms" at Col. 17 lines 5-30.

Goiffon '312 teaches at Col. 23 lines 30-40 different degrees of expansion are based on one or more parameters such as system performance requirement,

available processing and memory resources, but does not explicitly teach "one or more parameters comprise at least one parameter indicative of a date or time of day" as claimed. However, it is obvious that system performance requirement, available processing and memory resources depend upon date or time of the day. For example, Singh teaches at [0051] that system utilization "depend on the time of the day, the day of the week". Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Singh with Goiffon's teaching so that the system utilization can be determined correctly based on time of the day to efficiently use of the system resources without overloading the resources.

As per claim 6, Goiffon '312 and Singh teach the method of claim 5, Goiffon '312 also teaches: wherein "obtaining one or more expanded search terms comprises selecting a set of expanded terms from a plurality of sets of expanded terms, each set corresponding to a different level of expansion" at Col. 15 lines 3-63.

As per claim 7, Goiffon '312 teaches the method of claim 6, wherein "selecting a set of expanded terms from the plurality of sets of expanded terms comprises: generating a level of expansion based on the one or more parameters; and selecting a set of expanded search terms corresponding to the generated level of expansion" at Col. 15 lines 3-63.

As per claim 9, Goiffon teaches the method of claim 5, wherein “the at least one parameter indicative of a date or time of day is indicative of when the query is to be executed” Col. 14 lines 44-65 and Figs. 4-8.

As per claim 11, Goiffon '312 teaches the method of claim 5, wherein “the one or more parameters comprise one or more credentials of a user issuing the query” at Col. 10 lines 30-35.

As per claim 12, Goiffon '312 teaches the method of claim 11, wherein, “for at least some base search terms, different sets of expanded search terms are obtained for different credentials” at Col. 10 lines 30-35.

As per claim 13, Goiffon teaches the method of claim 11, wherein “the one or more credentials comprise at least one of: an identification of the user, a group to which the user belongs, a role of the user, and a security level of the user” at Col. 10 lines 30-35.

As per claim 14, Goiffon teaches the method of claim 13, wherein: “the one or more credentials comprises a role of the user; and obtaining one or more expanded search terms comprises selecting a set of expanded search terms associated with the role of the user” at Col. 10 lines 30-35 and Col. 15 lines 3-63.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goiffon et al. (US 6,226,792 B1), in view of Goiffon et al. (US 6,453,312 B1), hereinafter "**Goiffon '792**" and "**Goiffon '312**", and further in view of "**Singh**".

As per claim 1, Goiffon '792 teaches a method of searching fields of data repository using dynamic term expansion comprising:

- "obtaining a query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term" at Col. 28 lines 21-38 and Fig. 10;
- "generating a pointer to the identified set of expanded search terms" at Col. 19 lines 1-6;
- "prior to executing the query, retrieving the query and the information related to the pointer and modifying the query to contain one or more conditions based on one or more expanded search terms retrieved using the pointer" at Col. 28 lines 39-65.

Goiffon '792 does not explicitly teach "storing the query and information related to the pointer" as claimed. However, Goiffon '312 teach a similar method, including the step of storing the query and information related to the pointer" at Col. 18 lines 15-25 and Col. 21 lines 18-25. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the two Goiffon references in order to allow query to be executed in batch or at a later time, in order to reduce the workload on the database.

Goiffon '312 teaches at Col. 23 lines 30-40 different degrees of expansion are based on one or more parameters such as system performance requirement, available processing and memory resources, but does not explicitly teach "one or more parameters comprise at least one parameter indicative of a date or time of day" as claimed. However, it is obvious that system performance requirement, available processing and memory resources depend upon date or time of the day. For example, Singh teaches at [0051] that system utilization "depend on the time of the day, the day of the week". Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Singh with Goiffon's teaching so that the system utilization can be determined correctly based on time of the day to efficiently use of the system resources without overloading the resources.

As per claim 2, Goiffon '792 teaches the method of claim 1, further comprising "modifying the identified set of expanded search terms after generating the pointer" at

Col. 31 lines 1-17 and Fig. 15.

As per claim 3, Goiffon '792 teaches the method of claim 1, further comprising "recreating the pointer based on the information related to the pointer" at Fig. 15, 1514.

As per claim 4, Goiffon '792 teaches the method of claim 1, comprising: "obtaining one or more parameters indicative of a state of an environment in which the query is to be executed; and identifying a set of expanded terms associated with the base search term based, at least in part, on the one or more parameters" at Col. 28 lines 21-38 and Fig. 10.

Response to Arguments

8. Applicant's arguments with respect to claims 1-3, 5-7, 9-14 have been considered but are moot in view of the new ground(s) of rejection.

9. Regarding claim 10, applicant argued that Goiffon '312 fails to teach "wherein the one or more parameters comprises one or more parameters indicative how heavily one or more system resources are loaded". On the contrary, Goiffon '312 teaches at Col. 23 that different degrees of expansion are based on one or more parameters such as system performance requirement, available processing and memory resources.

10. Regarding claims 18-22, applicant argued that Goiffon '312 does not teach "allows the user to specify whether the set of expanded search terms should be dynamically linked with the query". On the contrary, Goiffon teaches at Col. 8 the "Get

Elements" service provided by the AIM EXE 105, which "reads elements from the Element Inventory 102". The element that is to be retrieved may be specified according to an element name, or may be specified using relationship data used to address a particular element within the Element Inventory". Goiffon therefore teaches that expanded search terms are stored and can be retrieved and linked to the query as claimed. Goiffon also teaches at Col. 14 lines 13-20 that "The creation of elements may be performed by a user so that query development is performed according to the user's customized Lexicon".

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the Claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure

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relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(571) 272-3574** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Primary Examiner
Art Unit 2166

February 19, 2008

A handwritten signature in cursive script, appearing to read 'Kpham', is written over a horizontal line.